

Name _____ Date _____ Hour _____

Sections 1 - 5

Module 1: Correctives

Section 1:1:1 Use a 4-step problem-solving approach

The number of T-shirts the Gap sells has been increasing at a constant rate. In September the store sold 210 T-shirts; in November the store sold 410 T-shirts; and in January the store sold 610 T-shirts.

1A) Find the increase in sales per month. Express answer as a rate. EXPLAIN.

1B) How many T-shirts did the Gap sell from September to January?

Section 1:1:2 Use rates to solve problems

Write a unit rate.

2) 145 books for 29 students

3) 756 miles in 14 hours

4) \$89.99 for 4 shirts

5) 457 miles per 26 gallons

Copy and complete each equation.

6) \$45.75/day = _____/week

7) \$16.21/foot = _____/inch

8) 21.3cm/month = _____/year

9) 210 lb/h = _____/min

Section 1:2:1 Make and use stem-and-leaf plots.

10) Make two stem-and-leaf plots, one for the Test A scores and one for the Test B scores.

Test Scores on Module 1			
Test A		Test B	
75	88	91	88
93	64	86	96
78	86	78	80
90	68	88	83
80	78	79	88

11) What do the shapes of the stem-and-leaf plots tell you about the test scores?

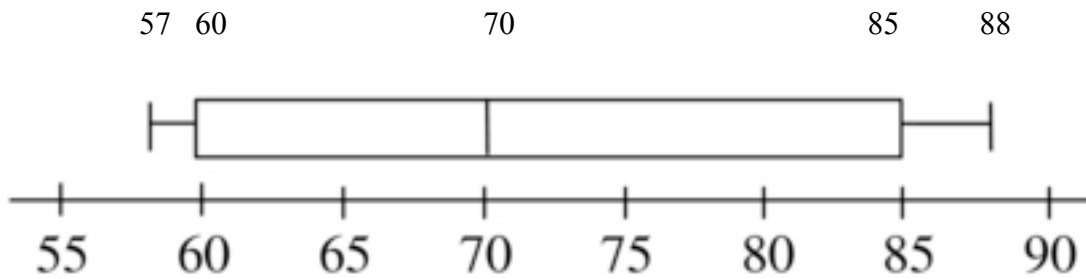
12) Find the mean, median, and mode for each set of scores.

	Test A	Test B
Mean		
Median		
Mode		

Section 1:2:2 Box and Whisker Plots

13) Use the box and whisker plot below to answer the following questions.

How Many Text Messages Does Mrs. Trendel Send Per Week

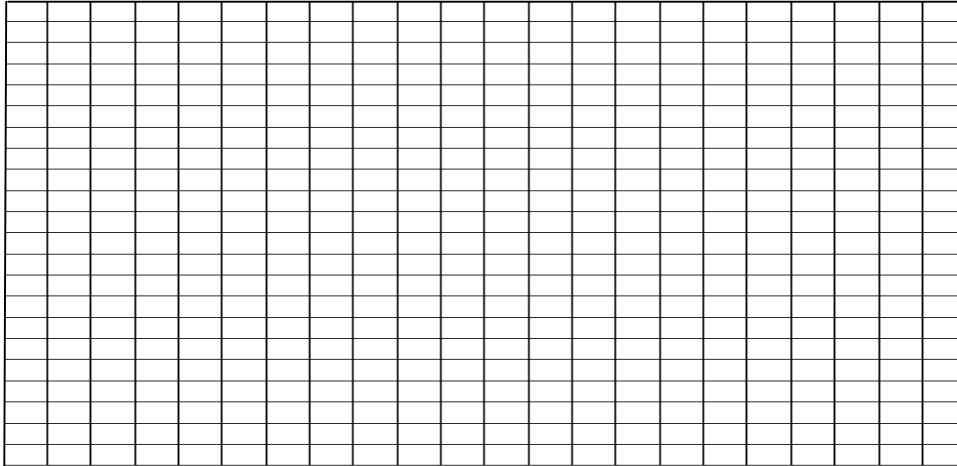


- a) What is the range of texts?
- b) What is the upper extreme?
- c) What is the lower quartile?
- d) What is the median?
- e) What percent of the time did Mrs. Trendel send 60 or more text messages?
- f) What percent of time did Mrs. Trendel send more than 85 text messages?
- g) What percent of the time did Mrs. Trendel send less than 70 text messages?

Section 1:3:1 Organize data in a scatter plot & Section 1:3:2 Use a fitted line to make predictions

14) Use the following data to create a scatter plot that shows the relationship between the temperature and the number of ice cream cones sold. Put the temperature on the horizontal axis and the number of ice cream cones sold on the vertical axis.

Temperature	70	75	95	87	93	91	89	88	79
# of Cones Sold	23	29	48	39	46	37	40	41	35



15) If there is a pattern in the points, draw a fitted line. Describe the pattern in complete sentences.

16) How many ice cream cones would you predict to be sold when the temperature is 90 degrees?

Section 1:4:1 Find circumference & write and evaluate expressions.

17) Find the circumference of a dinner plate whose diameter is 16.6 cm. Round to the nearest hundredth.

Evaluate the expression for the given values of the variables.

18) $2y - 19$ when $y = 26$

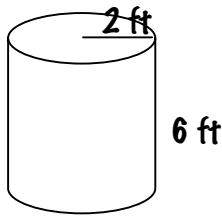
19) $2x^2 + 9$ when $x = 3$

20) Use algebraic symbols to write an expression for the word phrase: *six less than the sum of a number and ten.*

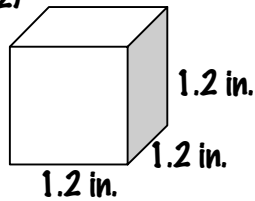
Section 1:4:2 Find the volume of rectangular prisms and circular cylinders.

Find the volume of each figure. Round answers to the nearest hundredth. Use 3.14 for π .

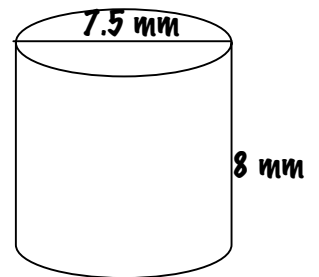
21)



22)



23)



Section 1:5:1 Write expressions from words.

Change each word sentence into a mathematical equation. Tell what each variable represents.

24A) The cost of going to the movies is \$7.50 for each adult and \$5.25 for each child.

24B) What would be the total cost for 6 adults and 8 children to go to the movies? Use your equation from 24 A to calculate the answer.

Section 1:5:2 Solve equations.

Use inverse operations to solve each equation. **SHOW ALL WORK!**

25) $4b + 8 = 24$

26) $5x = 85$

27) $\frac{b}{9} = 12$

Section 1:5:3 Simplify expressions.

28) $12n + 8 - 6n$

29) $45er + 5f + 6er - 3f$

30) $\frac{1}{2}w^2 + 8w + 2w^2$